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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/847,325	05/03/2001	Lars-Berno Fredriksson	0260/00071	7136
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Connolly Bove Lodge & Hutz LLP			CERVETTI, DAVID GARCIA	
Suite 800 1990 M Street, N.W.			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

}	Application No.	Applicant(s)
	09/847,325	FREDRIKSSON, LARS-BERNO
Office Action Summary	Examiner	Art Unit
	David G. Cervetti	2136
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet wi	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIO 36(a). In no event, however, may a r vill apply and will expire SIX (6) MON , cause the application to become AB	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on <u>03 M</u> 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matt	
Disposition of Claims		
4) ☐ Claim(s) 11-27 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 11-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 03 May 2001 is/are: a)	wn from consideration. r election requirement. r.	sted to by the Evaminer
Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	drawing(s) be held in abeyar ion is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in A rity documents have been u (PCT Rule 17.2(a)).	application No received in this National Stage
Attachment(s)	,. —	070 440
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/03/01</u>. Patent and Trademark Office 	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)

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DETAILED ACTION

1. Claims 11-27 are pending and have been examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Sweden on February 22, 1996. It is noted, however, that applicant has not filed a certified copy of the 9600652-3 and 9600653-1 application as required by 35 U.S.C. 119(b).

Drawings

- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:
 - 101A, 102A, 103A, 104A, 105A, 107A, 108A, 109A, 110A, 111A, 112A, 113A, 115A, 116A, 117A, 118A, 106aA, 114aA (page 11),
 - 201A-218A (page 12),
 - 301A-313A (pages 12-13), etc.

This is not a complete list of reference characters not included in the drawings but mentioned in the description. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:
 - 106, 114 (figure 1), etc.

This is not a complete list of reference characters not mentioned in the description. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

5. The disclosure is objected to because of the following informalities: the "Description of the Figures" does not include a description of figures 10a and 10b.

Appropriate correction is required.

6. The disclosure is objected to because of the following informalities: "CAN-protocol" (page 1, line 2), "GPSP" (page 5, line 21), "ISM-band", "IR-frequencies" (page 6, line 13), "EAN-number" (page 15, line 30), "CRC-code" (page 19, line 9). While well known in the art, these terms have not been defined. **This is not a complete list of informalities and not-defined terms and acronyms**. Appropriate correction is required.

Claim Objections

7. Claim 1 is objected to because of the following informalities: "CAN" must be spelled out. Appropriate correction is required.

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Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 11-13, 23, and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Jurewicz et al. (US Patent Number 5,323,385, hereinafter "Jurewicz").

Regarding claim 11, Jurewicz teaches a device in a system, comprising: a number of machines that each have a radio communication means for communicating with another of said radio communication means, each machine having a number of modules interconnected by a digital serial connection that communicate with one another using a CAN-system protocol (standard ISO 11898) (column 3, lines 1-67), a key allocation means for determining which of said machines may communicate through a particular instance of a message channel established between a subset of said machines and a master control system or between a subset of said machines alone, said key allocation means dynamically assigns each of said machines, within the subset of machines assigned to a message channel, a unique identification during each instance of an established message channel (column 3, lines 5-67); and said master control system includes said key allocation means and each of said modules either includes said key allocation means or is capable of adopting an assigned identification from said key allocation means (column 4, lines 1-67), wherein said identification is

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based not upon the real identity of said machine, but is dynamically assigned during a communicative coupling between said master control system and said module within said machine or between a plurality of modules in separate machines (column 3, lines 5-67, column 4, lines 1-67), and said modules in any particular machine have unique identities and the unique identity of a particular module or the unique identities of multiple modules in the machine form(s) the identity/identities for said particular machine's radio communication means (column 3, lines 5-67, column 4, lines 1-67).

Regarding claim 12, Jurewicz teaches wherein the respective module concerned is arranged such that a key-allocation-performing function is built into the module and/or is assignable to the module from a master system or systems (column 3, lines 1-67, column 4, lines 1-40).

Regarding claim 13, Jurewicz teaches wherein the modules in the CAN-system of a particular unit have unique identities, and in that the unique identity/identities of one or more modules in the CAN-system forms the identity/identities for particular radiocommunication-performing equipment (column 3, lines 1-67, column 4, lines 1-40).

Regarding claim 23, Jurewicz teaches wherein the machine is arranged with radio modules (WCANM), the sole task of which is to attend to the wireless radiocommunications (column 3, lines 2-67).

Regarding claim 25, Jurewicz teaches 25 wherein a module comprises a CPU containing a monitoring/control unit, memories, a CAN-controller, a CAN-driver and adjustment circuits for communication via a CAN-connection, which monitoring/control unit can be coupled together via a connector to a radio unit comprising a radio

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communication part and a communication part, the last-named of which comprises a CPU, memory and adjustment circuits for communication (column 3, lines 5-50).

Regarding claim 26, Jurewicz teaches characterized in that where there are a plurality of machines, which are served by a control desk unit, a machine which requires action sends a message on the message channel, and in that at the control desk unit one or more items of information appear on the number of machines requiring assistance, the identity of the machines and the nature of the assistance, a selection facility being provided at the control desk unit for a choice of running order for serving the machines in need of action (column 7, lines 25-67, column 8, lines 1-15).

Regarding claim 27, Jurewicz teaches characterized in that where there is a supervisory function from the control desk all machines make use of the same radio message channel and when a selected machine is serviced an exclusive radio message channel is established between the selected machine and the control desk unit (column 5, lines 40-67, column 6, lines 1-55).

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Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jurewicz, and further in view of Spaur et al. (US Patent Number 5,732,074, hereinafter "Spaur").

Regarding claim 14, Jurewicz does not expressly disclose that the machine can detect when the radio module is activated. However, Spaur teaches characterized in that a particular machine comprises a radio module, forming part of the machine's radio communication means, the machine can detect when the radio module is connected or activated, and the machines radio communication means adopts the identification of another particular module in the machine (column 4, lines 23-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to detect when a radio module is activated and to adopt another identification.

One of ordinary skill in the art would have been motivated to perform such a modification because it was well known in the art to use alternate identifiers.

Regarding claim 16, Jurewicz does not expressly disclose that the nodes cannot connect without the consent of a system node. However, Spaur teaches wherein the assignment of identifications is carried out by a system node selected within the

device, which system node is aware of all nodes forming part of the device and in which no node can be connected or exchanged or work within the device without the consent or knowledge of the system node (column 2, lines 10-67, column 10, lines 1-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a master node that provides identifiers and controls communication of nodes. One of ordinary skill in the art would have been motivated to perform such a modification because it was well known in the art to use centralized managements of resources and to assign identifications centrally (i.e. citizens of a country do not pick their own identifiers, but a centralized unit – government – picks or generates an identifier for each citizen (driver's license, passport, etc).

Regarding claim 17, the combination of Jurewicz and Spaur teaches the limitations as set forth under claim 16 above. Furthermore, Spaur teaches wherein the system node determines network key identifications, and a required hopping scheme or spread code in the radio communications (column 11, lines 1-67).

Regarding claim 18, the combination of Jurewicz and Spaur teaches the limitations as set forth under claim 17 above. Furthermore, Spaur teaches characterized in that where there is both a machine and a remote control unit intercommunicating, the system node in the machine determines a common key identification for both the machine and the remote control unit (column 10, lines 1-67, column 11, lines 1-67).

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12. Claims 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jurewicz.

Regarding claim 15, the Jurewicz does not expressly disclose identifying machines within an area with a common identifier and then identify these machines by the modules. However, Examiner takes Official Notice that identifying devices within an area and then by modules was conventional and well known. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to identify machines in this manner since Examiner takes Official Notice that it was conventional and well known.

Regarding claim 24, the Jurewicz does not expressly disclose handing off control when a unit passes a border area. However, Examiner takes Official Notice that handing off control when mobile units passed from one area of control to another was conventional and well known. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to transfer control from one remote control unit to another since Examiner takes Official Notice that it was conventional and well known.

13. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jurewicz, and further in view of Newlin et al. (US Patent Number 5,636,211, hereinafter "Newlin").

Regarding claim 19, Jurewicz does not expressly disclose distributing exclusively or without security risks. However, Newlin teaches wherein the network key identifications can be distributed exclusively, alternatively or as a supplement from a

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super-ordinate level, via a common communication channel, for a number of machines and remote control units, an area-common unit having complete information on the identities of all machines and remote control units within a particular area and the radio-communication equipment ending up at a low level from the device viewpoint and being able to be exchanged without any security risks (column 6, lines 25-67, column 7, lines 1-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to distribute identifiers without security risks. One of ordinary skill in the art would have been motivated to perform such a modification because it was well known in the art to exchange messages between nodes in a network securely.

14. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jurewicz and Spaur, and further in view of Braun (US Patent Number 5,455,762).

Regarding claim 20, the combination of Jurewicz and Spaur does not expressly disclose wherein a number of remote control units control a common machine. However, Braun teaches wherein a number of remote control units control a common machine, and a particular control command from a particular remote control unit is assignable or receivable in an identification device (bit pattern) in the controlled common machine, which identification device is disposed in the system node of the controlled machine (column 2, lines 10-65, column 4, lines 1-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made have a number of remote control units control a common machine. One of

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ordinary skill in the art would have been motivated to perform such a modification because it was well known in the art to send commands from multiple command sources.

Regarding claim 21, the combination of Jurewicz, Spaur, and Braun teaches the limitations as set forth under claim 20 above. Furthermore, Braun teaches wherein the control command can be received with the aid of a network key assigned to the controlling unit, and in that the system node selects the control command of a particular remote control unit according to a predetermined set of rules, which allow the remote control units to be connected at different time stages (column 2, lines 10-65, column 4, lines 1-67).

15. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jurewicz, and further in view of Braun.

Regarding claim 22, Jurewicz does not expressly disclose a number of machines are assignable to a number of remote control units. However, Braun teaches wherein a number of machines are assignable to a number of remote control units (column 2, lines 10-65), non-activated machines listen in on a common channel assigned to a work site, in that whenever an idle machine is assigned to a remote control unit a radio center establishes contact with the idle machine and transfers a particular identification to the remote control unit, in that whenever the remote control unit is activated the communication means of the idle machine establishes contact with the radio communication means of the selected remote control unit via the common channel and reports its identification and the fact that it is master of the connection

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channel, and in that an exclusive channel between the machine and he remote control unit can in this case be set up, in which exclusive channel information is transferred (column 4, lines 1-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to assign machines to a number of remote control units. One of ordinary skill in the art would have been motivated to perform such a modification because it was well known in the art to send commands from multiple command sources.

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Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gilhousen et al. (US Patent Number 5,101,501) discloses handing off control in communications related to a cellular telephone system.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
2131

DGC